Lothar Hennighausen, Ph.D.

Dr. Lothar Hennighausen is a geneticist whose career includes contributions in academia and government. A native of a small town in Germany, Dr. Hennighausen performed undergraduate work at the Universities of Marburg and Cologne (Germany) and Edinburgh (Scotland), and obtained his diploma degree in Cologne. He earned his Ph.D. in Genetics, Chemistry and Biochemistry with magna cum laude at the University of Cologne in 1982 where he was the first to clone genes that are expressed specifically in mouse mammary tissue under the control of hormones. Dr. Hennighausen immigrated to the United States in 1983, and until 1985 he was a post-doctoral fellow with Dr. Philip Leder at Harvard Medical School where he explored the role of transcription factors in the control of immunoglobulin genes and the myc oncogene.

In 1985 Dr. Hennighausen joined the National Institutes of Health in Bethesda, Maryland to establish a research group. During his 20 years at the NIH, he moved up the ranks to become the Chief of the Laboratory of Genetics and Physiology at the National Institute of Diabetes, Digestive and Kidney Diseases and a member of Senior Biomedical Research Service. Dr. Hennighausen presently leads a research laboratory that explores genetic circuitry in organ development, cancer, obesity and diabetes using experimental mouse genetics.

During his career, Dr. Hennighausen organized international conferences and delivered keynote lectures, including the Presidential Lecture at the Society for the Study of Reproduction and the Olof Pearson Lecture at Case Western Reserve University. In 1992, he was awarded a fellowship by the Humboldt Society to join Dr. Peter Gruss at the Max-Planck-Institute in Goettingen (Germany) for one year as a Visiting Professor. In 2001 Dr. Hennighausen received the Alexander-von-Humboldt Senior Research Award to conduct exploratory research for one year with Dr. Axel Ullrich at the Max-Planck-Institute in Munich (Germany). He holds several patents on genes and transgenic animals and delivery systems for gene therapy.

Dr. Hennighausen is renowned for his work on genetic networks that control organogenesis, most notably the mammary gland and breast cancer. He has published over 180 articles in peer-reviewed scientific journals and his work has been cited over 6000 times. Dr. Hennighausen was among the first to introduce experimental mouse genetics to investigate organ development and molecular mechanisms of breast cancer. He discovered genes that regulate hormone-controlled development and demonstrated the role of regulatory proteins in mammary development and physiology. In 1987 Dr. Hennighausen paved the way in the development of

the mammary bioreactor with the first transgenic animal that produced a human pharmaceutical drug in its milk. More recently Dr. Hennighausen pioneered genetic technologies to explore gene function in specific cell types within the whole organism (mouse), a now widely recognized approach to study molecular mechanisms in organogenesis and cancer. Using this approach Dr. Hennighausen was able to explore the genetic circuitry in the developing mammary gland, during breast cancer progression and more recently in diabetes.

Dr. Hennighausen has delivered more than 300 lectures at universities and international conferences, taught scientific courses, organized scientific conferences, and has mentored more than 40 scientists. Previous members of his laboratory hold faculty positions at Universities in the United States, Germany, Spain, Great-Britain, Korea and Japan and in government research institutes in France and Israel as well as the National Cancer Institute. Others have joined Industry, Biotech firms, investment houses and consulting firms. Former technicians entered Medical School, Graduate School and MD/Ph.D. programs. Dr. Hennighausen has been a member of study sections at the NIH and the National Cancer Institute of Canada, he was a member of the Department of Defense Breast Cancer Initiative and he participated in site visits for program project grants at Universities in the United States and Canada. Dr. Hennighausen is currently a member of the NCI Consortium for the use of mouse models for human cancer and an NIDDK consortium on diabetes research. He also serves on the editorial board of leading scientific journals, and he developed databases for the use of mouse genetics in breast cancer.

Dr. Hennighausen is married to Dr. Priscilla Furth, Professor of Oncology at the Lombardi Cancer Center, Georgetown University. They have three children, Molly (18), Zach (17) and Hannah (15) and live in Chevy Chase, Maryland. Molly is in Ithaca College, Zach excels in wrestling and cross country running and Hannah specializes in field hockey and running. Dr. Hennighausen is an avid cyclist and in his spare time he rides centuries (100 miles) for charities, including the Lance Armstrong Foundation and the Juvenile Diabetes Research Foundation. As part of this he rode with Lance Armstrong and Tyler Hamilton. Together with his wife Priscilla he hikes, bikes and skis the Austrian Alps and he recently completed the Dolomite Marathon.